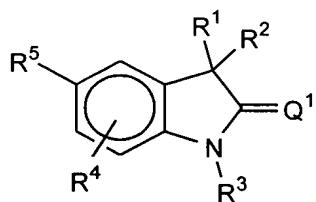


What is Claimed:

1. A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula I, or a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula I is:



I

wherein:

R¹ and R² are selected from the group consisting of H, alkyl, substituted alkyl, OH, O(alkyl), O(substituted alkyl), O(Acetyl), aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, alkylaryl, substituted alkylaryl, alkylheteroaryl, substituted alkylheteroaryl, 1-propynyl, substituted 1-propynyl, 3-propynyl, and substituted 3-propynyl;

or R¹ and R² are joined to form a ring selected from the group consisting of -CH₂(CH₂)_nCH₂-, -CH₂CH₂C(CH₃)₂CH₂CH₂-, -O(CH₂)_mCH₂-, -O(CH₂)_pO-, -CH₂CH₂OCH₂CH₂-, -CH₂CH₂N(H)CH₂CH₂-, and -CH₂CH₂N(alkyl)CH₂CH₂-;

m is an integer from 1 to 4;

n is an integer from 1 to 5;

p is an integer from 1 to 4;

or R¹ and R² form a double bond to C(CH₃)₂, C(cycloalkyl), O, or C(cycloether);

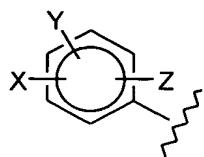
R³ is selected from the group consisting of H, OH, NH₂, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₆ alkenyl, substituted C₃ to C₆ alkenyl, alkynyl, substituted alkynyl, and COR^A;

R^A is selected from the group consisting of H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, and substituted C₁ to C₃ aminoalkyl;

R^4 is selected from the group consisting of H, halogen, CN, NH₂, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₁ to C₆ alkoxy, substituted C₁ to C₆ alkoxy, C₁ to C₆ aminoalkyl, and substituted C₁ to C₆ aminoalkyl;

R^5 is selected from the group consisting of a), b) and c):

a) a substituted benzene ring having the structure:



X is selected from the group consisting of halogen, OH, CN, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ thioalkyl, substituted C₁ to C₃ thioalkyl, S(O)alkyl, S(O)₂alkyl, C₁ to C₃ aminoalkyl, substituted C₁ to C₃ aminoalkyl, NO₂, C₁ to C₃ perfluoroalkyl, substituted C₁ to C₃ perfluoroalkyl, 5 or 6 membered heterocyclic ring having 1 to 3 heteroatoms, CONH₂, CSNH₂, CNHNHOH, CNH₂NOH, CNHNOH, COR^B, CSR^B, OCOR^B, and NR^CCOR^B;

R^B is selected from the group consisting of H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, aryl, substituted aryl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, and substituted C₁ to C₃ aminoalkyl;

R^C is H, C₁ to C₃ alkyl, or substituted C₁ to C₃ alkyl;

Y and Z are independently selected from the group consisting of H, halogen, CN, NO₂, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₄ alkyl, substituted C₁ to C₄ alkyl, C₁ to C₃ thioalkyl, and substituted C₁ to C₃ thioalkyl;

b) a five or six membered heterocyclic ring having 1, 2, or 3 heteroatoms selected from the group consisting of O, S, SO, SO₂ and NR⁶ and having one or two independent substituents from the group consisting of H, halogen, CN, NO₂, C₁ to C₄ alkyl, substituted C₁ to C₄ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, substituted C₁ to C₃ aminoalkyl, COR^D, CSR^D, and NR^ECOR^D;

R^D is H, NH₂, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, aryl,

substituted aryl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, or substituted C₁ to C₃ aminoalkyl;

R^E is H, C₁ to C₃ alkyl, or substituted C₁ to C₃ alkyl;

R⁶ is H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, or C₁ to C₄CO₂alkyl;

or

c) an indol-4-yl, indol-7-yl or benzo-2-thiophene moiety, wherein said moiety is optionally substituted by from 1 to 3 substituents selected from the group consisting of halogen, alkyl, substituted alkyl, CN, NO₂, alkoxy, substituted alkoxy, and CF₃;

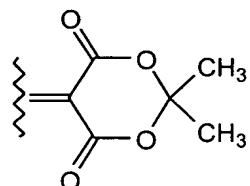
Q¹ is S, NR⁷, or CR⁸R⁹;

R⁷ is selected from the group consisting of CN, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₈ cycloalkyl, substituted C₃ to C₈ cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, SO₂CF₃, OR¹¹, and NR¹¹R¹²;

R⁸ and R⁹ are independent substituents selected from the group consisting of H, alkyl, substituted alkyl, acyl, substituted acyl, aroyl, substituted aroyl, C₃ to C₈ cycloalkyl, substituted C₃ to C₈ cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, NO₂, CN, and CO₂R¹⁰;

R¹⁰ is C₁ to C₃ alkyl or substituted C₁ to C₃ alkyl;

or CR⁸R⁹ comprise a six membered ring having the structure:



R¹¹ and R¹² are independently selected from the group consisting of H, alkyl, substituted alkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic

ring, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl; or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

2. The method according to claim 1, wherein said compound of formula I and said selective estrogen receptor modulator are delivered in a single composition.

3. The method according to claim 1, wherein said compound of formula I and said selective estrogen receptor modulator are delivered separately.

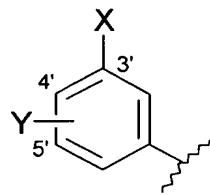
4. The method according to claim 1, wherein said selective estrogen receptor modulator is selected from the group consisting of EM-800, EM-652, raloxifene hydrochloride, arzoxifene, lasofoxifene, droloxitene, tamoxifen citrate, 4-hydroxytamoxifen citrate, clomiphene citrate, toremifene citrate, pipendoxifene, idoxifene, levormeloxifene, centchroman, nafoxidene, and bazedoxifene.

5. The method according to claim 1, wherein said compound is delivered at a daily dosage of about 0.1 to about 50 mg.

6. The method according to claim 1, wherein said regimen comprises delivering said composition daily for 1 to about 21 days, wherein said regimen is a cycle which is repeated monthly.

7. The method according to claim 1, wherein said selective estrogen receptor modulator is delivered at a daily dosage of about 0.2 to about 100 mg.

8. The method according to Claim 1, wherein R¹ and R² are joined to form a -CH₂(CH₂)_nCH₂- ring; n is 3; R³ and R⁴ are H; R⁵ is the substituted benzene ring having the structure:

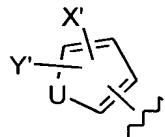


X is selected from the group consisting of halogen, CN, CONH₂, CSNH₂, COR^B, CSR^B, C₁ to C₃ alkoxy, C₁ to C₃ alkyl, NO₂, C₁ to C₃ perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and C₁ to C₃ thioalkyl;

R^B is C₁ to C₃ aminoalkyl or substituted C₁ to C₃ aminoalkyl, wherein said aminoalkyl is NH(alkyl) or N(alkyl)₂;

Y is selected from the group consisting of H, halogen, CN, NO₂, C₁ to C₃ alkoxy, C₁ to C₄ alkyl, and C₁ to C₃ thioalkyl.

9. The method according to Claim 1, wherein R¹ and R² are joined to form the -CH₂(CH₂)_nCH₂- ring; n is 3; R³ and R⁴ are H; R⁵ is the five membered ring having the structure:



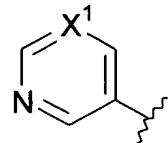
U is O, S, or NR⁶;

X' is selected from the group consisting of halogen, CN, NO₂, CONH₂, CSNH₂, COR^B, CSR^B, C₁ to C₃ alkyl, and C₁ to C₃ alkoxy;

R^B is C₁ to C₃ aminoalkyl or substituted C₁ to C₃ aminoalkyl, wherein said aminoalkyl is NH(alkyl) or N(alkyl)₂;

Y' is selected from the group consisting of H, halogen, and C₁ to C₄ alkyl, wherein said halogen is F.

10. The method according to Claim 1, wherein R¹ and R² are joined to form a -CH₂(CH₂)_nCH₂- ring; n is 3; R³ and R⁴ are H; R⁵ is the six membered ring having the structure:



X¹ is N or CX²;

X² is halogen, CN, CONH₂, CSNH₂, COR^B, CSR^B, or NO₂;

R^B is C₁ to C₃ aminoalkyl or substituted C₁ to C₃ aminoalkyl, wherein said aminoalkyl is NH(alkyl) or N(alkyl)₂.

11. The method according to claim 1, wherein R¹ and R² are alkyl or substituted alkyl; R³ is H.

12. The method according to claim 1, wherein R¹ and R² are joined to form a ring selected from the group consisting of -CH₂(CH₂)_nCH₂-, -CH₂CH₂C(CH₃)₂CH₂CH₂-, -O(CH₂)_mCH₂-, -O(CH₂)_pO-, -CH₂CH₂OCH₂CH₂-, -CH₂CH₂N(H)CH₂CH₂-, and -CH₂CH₂N(alkyl)CH₂CH₂-, R³ is H.

13. The method according to claim 1, wherein R³ is H; Q¹ is S or NR⁷.

14. The method according to claim 1, wherein said compound is selected from the group consisting of 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-thione, 3-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzonitrile, 4-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-2-thiophenecarbonitrile, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5'-yl)-5-fluorobenzonitrile, 4-Methyl-5-(1,2-dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5'-yl)-2-thiophenethioamide, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5'-yl)-1-(tert-butoxycarbonyl)-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5'-yl)-1-H-pyrrole-2-carbonitrile, 5-(2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-3-thiophenecarbonitrile, 5-(1,2-Dihydro-thioxospiro[cyclopentane-

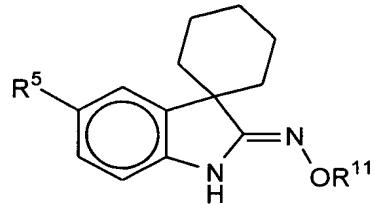
1,3-[3H]indol]-5-yl)-2-thiophenecarbonitrile, 5-(3-Fluoro-4-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(2-Amino-5-pyrimidinyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 5-(3-chlorophenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-Benzyl-5-(3-chlorophenyl)-3-methyl-1,3-dihydro-2H-indole-2-thione, 4-(3,3-dimethyl-2-thioxo-2,3-dihydro-1H-indol-5-yl)-2-furanitrile, 5-(3-methoxyphenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-pyridinecarbonitrile, 5-(3,4-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(5-Chloro-2-thienyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-furancarbonitrile, 5-(3-Chloro-4-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chloro-5-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3,5-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-propyl-2-thiophenecarbonitrile, 5-(3-Fluoro-4-nitrophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-furancarbonitrile, 5"--(3-Chlorophenyl)spiro[cyclobutane-1,3"--[3H]indol]-2"(1" H)-thione, 5"--(2-Chlorophenyl)spiro[cyclohexane-1,3"--[3H]indol]-2"(1" H)-thione, 5"--(4-Chlorophenyl)spiro[cyclohexane-1,3"--[3H]indol]-2"(1" H)-thione, 5-(1",2"-Dihydro-2"-thioxospiro[cyclohexane-1,3"--[3H]indol]-5"-yl)-4-methyl-2-thiophenecarbonitrile, 5-(1",2"-Dihydro-2"-thioxospiro[cyclohexane-1,3"--[3H]indol]-5"-yl)-2-thiophenecarbonitrile, 5"--(3-Fluorophenyl)spiro[cyclohexane-1,3"--[3H]indol]-2"(1" H)-thione, 5-(3-Hydroxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-chlorophenyl)-3,3-diethyl-1,3-dihydro-2H-indole-2-thione, 5-(4-Fluoro-3-(trifluoromethyl)phenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-n-butyl-2-thiophenecarbonitrile, 5-(3-Fluoro-5-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chlorophenyl)-N-hydroxyspiro[cyclohexane-1,3'-

[3H]indol]-2-amine, N-(Acetyloxy)-5'-(3-chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2"amine, 5'-(3-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(2-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(4-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3,4-difluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-methoxyphenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-nitrophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-cyanophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 3-(1',2'-Dihydro-2'-(hydroxyimino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluorobenzonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-1-methyl-2-carbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-2-carbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(acetoxymino)-5'-yl)-2-thiophenecarbonitrile, 3-Fluoro-N'-hydroxy-5-(2'-(hydroxyamino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzenecarboximidamide, N'-Hydroxy-5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarboximidamide, N'-Hydroxy-4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboximidamide, N'-Hydroxy-5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboximidamide, 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(3-Cyano-5-fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2-ylidenecyanamide, 5'-(5-Cyano-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-3-methyl-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-thiophen-3-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 3-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluoro-benzonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-

[3H]indol]-5'-yl)-1-methyl-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-4-methyl-thiophene-2-carbonitrile, and 4-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

15. The method according to any of claims 1, wherein said compound is 5'-(5-Cyano-1-methyl-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

16. A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula II, or a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula II is:



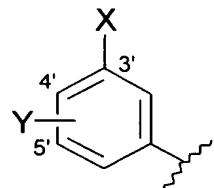
II

wherein:

R¹¹ is selected from the group consisting of H, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl;

R⁵ is (i), (ii), or (iii):

(i) a substituted benzene ring having the structure:

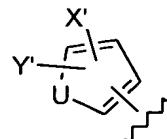


wherein:

X is selected from the group consisting of halogen, CN, CONH₂, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂, CNHNHOH, CNH₂NOH, C₁ to C₃ alkoxy, C₁ to C₃ alkyl, NO₂, C₁ to C₃ perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and C₁ to C₃ thioalkyl;

Y is selected from the group consisting of H, halogen, CN, NO₂, C₁ to C₃ alkoxy, C₁ to C₄ alkyl, and C₁ to C₃ thioalkyl;

(ii) a five membered ring having the structure:



wherein:

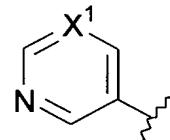
U is O, S, or NR⁶;

R⁶ is H, C₁ to C₃ alkyl, or C₁ to C₄ CO₂alkyl;

X' is selected from the group consisting of halogen, CN, NO₂, CONH₂, CNHNHOH, CNH₂NOH, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂, C₁ to C₃ alkyl, and C₁ to C₃ alkoxy;

Y' is selected from the group consisting of H, F, and C₁ to C₄ alkyl; or

(iii) a six membered ring having the structure:



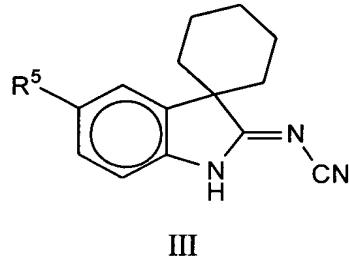
wherein:

X¹ is N or CX²;

X² is halogen, CN, CONH₂, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂ or NO₂;
or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

17. The method according to claim 16, wherein R⁵ is said five membered ring and U is O or S.

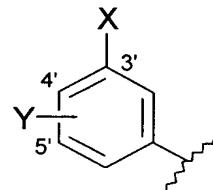
18. A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula III in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula III is:



wherein:

R⁵ is (i), (ii), or (iii):

(i) a substituted benzene ring having the structure:

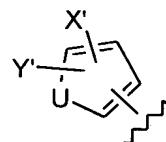


wherein:

X is selected from the group consisting of halogen, CN, CONH₂, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂, CNHNOH, C₁ to C₃ alkoxy, C₁ to C₃ alkyl, NO₂, C₁ to C₃ perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and C₁ to C₃ thioalkyl;

Y is selected from the group consisting of H, halogen, CN, NO₂, C₁ to C₃ alkoxy, C₁ to C₄ alkyl, and C₁ to C₃ thioalkyl;

(ii) a five membered ring having the structure:



wherein:

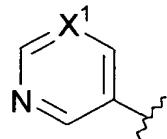
U is O, S, or NR⁶;

R⁶ is H, C₁ to C₃ alkyl, or C₁ to C₄ CO₂alkyl;

X' is selected from the group consisting of halogen, CN, NO₂, CONH₂,

CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂, C₁ to C₃ alkyl, and C₁ to C₃ alkoxy;

- Y' is selected from the group consisting of H, F and C₁ to C₄ alkyl; or
(iii) a six membered ring having the structure:

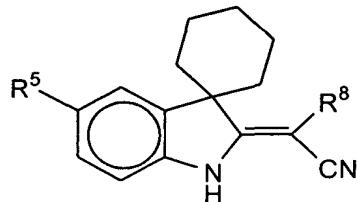


wherein:

X¹ is N or CX²;
X² is halogen, CN, CONH₂, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂ or NO₂;
or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

19. The method according to claim 17, wherein R⁵ is the five membered ring (ii) and U is O or S.

20. A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula IV in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula IV is:



IV

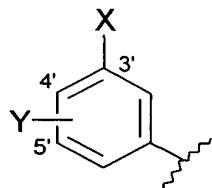
wherein:

R⁸ is selected from the group consisting of H, CO₂R¹⁰, acyl, substituted acyl, aroyl, substituted aroyl, alkyl, substituted alkyl, and CN;

R¹⁰ is C₁ to C₃ alkyl;

R⁵ is (i), (ii), or (iii):

(i) a substituted benzene ring having the structure:

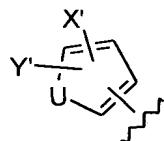


wherein:

X is selected from the group consisting of halogen, CN, CONH₂, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂, CNHNOH, C₁ to C₃ alkoxy, C₁ to C₃ alkyl, NO₂, C₁ to C₃ perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and C₁ to C₃ thioalkyl;

Y is selected from the group consisting of H, halogen, CN, NO₂, C₁ to C₃ alkoxy, C₁ to C₄ alkyl, and C₁ to C₃ thioalkyl;

(ii) a five membered ring having the structure:



wherein:

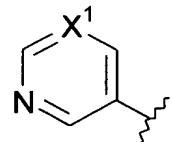
U is O, S, or NR⁶;

R⁶ is H, C₁ to C₃ alkyl, or C₁ to C₄ CO₂alkyl;

X' is selected from the group consisting of halogen, CN, NO₂, CONH₂, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂, C₁ to C₃ alkyl, and C₁ to C₃ alkoxy;

Y' is selected from the group consisting of H, F and C₁ to C₄ alkyl;

(iii) a six membered ring having the structure:



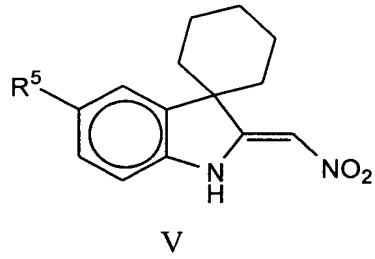
wherein:

X^1 is N or CX^2 ;

X^2 is halogen, CN, CONH₂, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂ or NO₂;
or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

21. The method according to claim 10, wherein R⁵ is the five-membered ring (ii) and U is O or S.

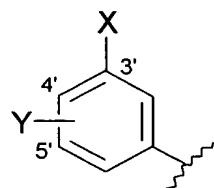
22. A method of inducing contraception comprising the step of delivering to a female of child-bearing age a composition comprising a compound of formula V in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula V is:



V

R⁵ is (i), (ii), or (iii):

(i) a substituted benzene ring having the structure:



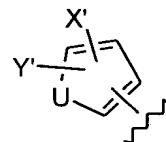
wherein:

X is selected from the group consisting of halogen, CN, CONH₂,

CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂, CNHNOH, C₁ to C₃ alkoxy, C₁ to C₃ alkyl, NO₂, C₁ to C₃ perfluoroalkyl, 5 membered heterocyclic ring having 1 to 3 heteroatoms, and C₁ to C₃ thioalkyl;

Y is selected from the group consisting of H, halogen, CN, NO₂, C₁ to C₃ alkoxy, C₁ to C₄ alkyl, and C₁ to C₃ thioalkyl;

(ii) a five membered ring having the structure:



wherein:

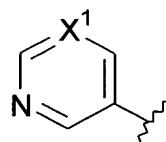
U is O, S, or NR⁶;

R⁶ is H, C₁ to C₃ alkyl, or C₁ to C₄ CO₂alkyl;

X' is selected from the group consisting of halogen, CN, NO₂, CONH₂, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂, C₁ to C₃ alkyl, and C₁ to C₃ alkoxy;

Y' is selected from the group consisting of H, F, and C₁ to C₄ alkyl;

(iii) a six membered ring having the structure:



wherein:

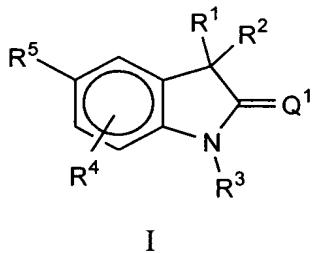
X¹ is N or CX²;

X² is halogen, CN, CONH₂, CSNH₂, CONHalkyl, CSNHalkyl, CON(alkyl)₂, CSN(alkyl)₂ or NO₂;
or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

23. The method according to claim 22, wherein R⁵ is the five membered ring (ii) and U is O or S.

24. A method of providing hormone replacement therapy comprising the step of delivering to a female a composition comprising a compound of formula I, or

a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula I is:



wherein:

R¹ and R² are selected from the group consisting of H, alkyl, substituted alkyl, OH, O(alkyl), O(substituted alkyl), O(Acetyl), aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, alkylaryl, substituted alkylaryl, alkylheteroaryl, substituted alkylheteroaryl, 1-propynyl, substituted 1-propynyl, 3-propynyl, and substituted 3-propynyl;

or R¹ and R² are joined to form a ring selected from the group consisting of -CH₂(CH₂)_nCH₂-, -CH₂CH₂C(CH₃)₂CH₂CH₂-, -O(CH₂)_mCH₂-, -O(CH₂)_pO-, -CH₂CH₂OCH₂CH₂-, -CH₂CH₂N(H)CH₂CH₂-, and -CH₂CH₂N(alkyl)CH₂CH₂-;

m is an integer from 1 to 4;

n is an integer from 1 to 5;

p is an integer from 1 to 4;

or R¹ and R² form a double bond to C(CH₃)₂, C(cycloalkyl), O, or C(cycloether);

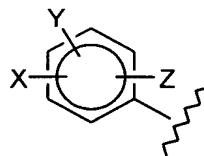
R³ is selected from the group consisting of H, OH, NH₂, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₆ alkenyl, substituted C₃ to C₆ alkenyl, alkynyl, substituted alkynyl, and COR^A;

R^A is selected from the group consisting of H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, and substituted C₁ to C₃ aminoalkyl;

R⁴ is selected from the group consisting of H, halogen, CN, NH₂, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₁ to C₆ alkoxy, substituted C₁ to C₆ alkoxy, C₁ to C₆ aminoalkyl, and substituted C₁ to C₆ aminoalkyl;

R^5 is selected from the group consisting of a), b) and c):

- a) a substituted benzene ring having the structure:



X is selected from the group consisting of halogen, OH, CN, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ thioalkyl, substituted C₁ to C₃ thioalkyl, S(O)alkyl, S(O)₂alkyl, C₁ to C₃ aminoalkyl, substituted C₁ to C₃ aminoalkyl, NO₂, C₁ to C₃ perfluoroalkyl, substituted C₁ to C₃ perfluoroalkyl, 5 or 6 membered heterocyclic ring having 1 to 3 heteroatoms, CONH₂, CSNH₂, CNHNHOH, CNH₂NOH, CNHNOH, COR^B, CSR^B, OCOR^B, and NR^CCOR^B;

R^B is selected from the group consisting of H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, aryl, substituted aryl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, and substituted C₁ to C₃ aminoalkyl;

R^C is H, C₁ to C₃ alkyl, or substituted C₁ to C₃ alkyl;

Y and Z are independently selected from the group consisting of H, halogen, CN, NO₂, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₄ alkyl, substituted C₁ to C₄ alkyl, C₁ to C₃ thioalkyl, and substituted C₁ to C₃ thioalkyl;

b) a five or six membered heterocyclic ring having 1, 2, or 3 heteroatoms selected from the group consisting of O, S, SO, SO₂ and NR⁶ and having one or two independent substituents from the group consisting of H, halogen, CN, NO₂, C₁ to C₄ alkyl, substituted C₁ to C₄ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, substituted C₁ to C₃ aminoalkyl, COR^D, CSR^D, and NR^ECOR^D;

R^D is H, NH₂, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, aryl, substituted aryl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, or substituted C₁ to C₃ aminoalkyl;

R^E is H, C₁ to C₃ alkyl, or substituted C₁ to C₃ alkyl;

R⁶ is H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, or C₁ to C₄CO₂alkyl;

or

c) an indol-4-yl, indol-7-yl or benzo-2-thiophene moiety, wherein said moiety is optionally substituted by from 1 to 3 substituents selected from the group consisting of halogen, alkyl, substituted alkyl, CN, NO₂, alkoxy, substituted alkoxy, and CF₃;

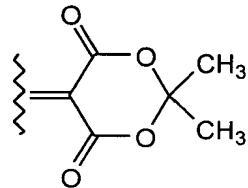
Q¹ is S, NR⁷, or CR⁸R⁹;

R⁷ is selected from the group consisting of CN, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₈ cycloalkyl, substituted C₃ to C₈ cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, SO₂CF₃, OR¹¹, and NR¹¹R¹²;

R⁸ and R⁹ are independent substituents selected from the group consisting of H, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₈ cycloalkyl, substituted C₃ to C₈ cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, NO₂, CN, and CO₂R¹⁰;

R¹⁰ is C₁ to C₃ alkyl or substituted C₁ to C₃ alkyl;

or CR⁸R⁹ comprise a six membered ring having the structure:



R¹¹ and R¹² are independently selected from the group consisting of H, alkyl, substituted alkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl; or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

25. The method according to claim 23, wherein said hormone replacement therapy is perimenopausal, menopausal, or postmenopausal.

26. The method according to claim 24, wherein R¹ and R² are alkyl or substituted alkyl; R³ is H.

27. The method according to claim 24, wherein R¹ and R² are joined to form a ring selected from the group consisting of -CH₂(CH₂)_nCH₂-, -CH₂CH₂C(CH₃)₂CH₂CH₂-, -O(CH₂)_mCH₂-, -O(CH₂)_pO-, -CH₂CH₂OCH₂CH₂-, -CH₂CH₂N(H)CH₂CH₂-, and -CH₂CH₂N(alkyl)CH₂CH₂-, R³ is H.

28. The method according to claim 24, wherein R³ is H; Q¹ is S or NR⁷.

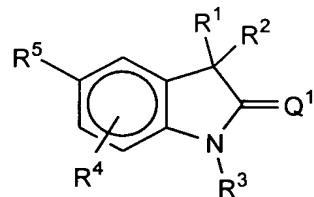
29. The method according to claim 24, wherein said compound is selected from the group consisting of 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-thione, 3-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzonitrile, 4-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-2-thiophenecarbonitrile, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 4-Methyl-5-(1,2-dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-thiophenethioamide, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-(tert-butoxycarbonyl)-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-H-pyrrole-2-carbonitrile, 5-(2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-3-thiophenecarbonitrile, 5-(1,2-Dihydro-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-2-thiophenecarbonitrile, 5-(3-Fluoro-4-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(2-Amino-5-pyrimidinyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 5-(3-chlorophenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-Benzyl-5-(3-chlorophenyl)-3-methyl-1,3-dihydro-2H-indole-2-thione, 4-(3,3-dimethyl-2-thioxo-2,3-dihydro-1H-indol-5-yl)-2-furonitrile, 5-(3-methoxyphenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-pyridinecarbonitrile, 5-(3,4-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(5-Chloro-2-thienyl)spiro[cyclohexane-1,3-

[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-furancarbonitrile, 5-(3-Chloro-4-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chloro-5-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3,5-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-propyl-2-thiophenecarbonitrile, 5-(3-Fluoro-4-nitrophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-furancarbonitrile, 5''-(3-Chlorophenyl)spiro[cyclobutane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(2-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5''-(4-Chlorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-4-methyl-2-thiophenecarbonitrile, 5-(1'',2''-Dihydro-2''-thioxospiro[cyclohexane-1,3''-[3H]indol]-5''-yl)-2-thiophenecarbonitrile, 5''-(3-Fluorophenyl)spiro[cyclohexane-1,3''-[3H]indol]-2''(1''H)-thione, 5-(3-Hydroxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-chlorophenyl)-3,3-diethyl-1,3-dihydro-2H-indole-2-thione, 5-(4-Fluoro-3-(trifluoromethyl)phenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-n-butyl-2-thiophenecarbonitrile, 5-(3-Fluoro-5-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chlorophenyl)-N-hydroxyspiro[cyclohexane-1,3'-[3H]indol]-2-amine, N-(Acetyloxy)-5'-(3-chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''amine, 5'-(3-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''(1'H)-one oxime, 5'-(2-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''(1'H)-one oxime, 5'-(4-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''(1'H)-one oxime, 5'-(3,4-difluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''(1'H)-one oxime, 5'-(3-methoxyphenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''(1'H)-one oxime, 5'-(3-nitrophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''(1'H)-one oxime, 5'-(3-cyanophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2''(1'H)-one oxime, 3-(1',2'-Dihydro-2'-(hydroxyimino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluorobenzonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-

(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-1-methyl-2-carbonitrile, 5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-2-carbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'(acetoxymino)-5'-yl)-2-thiophenecarbonitrile, 3-Fluoro-N'-hydroxy-5-(2'-(hydroxyamino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarboximidamide, N'-Hydroxy-4-(spiro[cyclohexane-1,3'-[3H]indol]-2'-hydroxyimino)-5'-yl-2-thiophenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboxidamide, 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yldenencyanamide, 5'-(3-Cyano-5-fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yldenencyanamide, 5'-(5-Cyano-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2-yldenencyanamide, 5'-(5-Cyano-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yldenencyanamide, 5'-(5-Cyano-3-methyl-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yldenencyanamide, 5'-(5-Cyano-thiophen-3-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yldenencyanamide, 3-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluoro-benzonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-4-methyl-thiophene-2-carbonitrile, and 4-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

30. The method according to claim 24, wherein said compound is 5'-(5-Cyano-1-methyl-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yldenencyanamide, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

31. A method of treating carcinomas comprising the step of delivering to a mammal in need thereof a composition comprising a compound of formula I, or a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said mammal, wherein formula I is:



I

wherein:

R¹ and R² are selected from the group consisting of H, alkyl, substituted alkyl, OH, O(alkyl), O(substituted alkyl), O(Acetyl), aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, alkylaryl, substituted alkylaryl, alkylheteroaryl, substituted alkylheteroaryl, 1-propynyl, substituted 1-propynyl, 3-propynyl, and substituted 3-propynyl;

or R¹ and R² are joined to form a ring selected from the group consisting of -CH₂(CH₂)_nCH₂-, -CH₂CH₂C(CH₃)₂CH₂CH₂-, -O(CH₂)_mCH₂-, -O(CH₂)_pO-, -CH₂CH₂OCH₂CH₂-, -CH₂CH₂N(H)CH₂CH₂-, and -CH₂CH₂N(alkyl)CH₂CH₂-;

m is an integer from 1 to 4;

n is an integer from 1 to 5;

p is an integer from 1 to 4;

or R¹ and R² form a double bond to C(CH₃)₂, C(cycloalkyl), O, or C(cycloether);

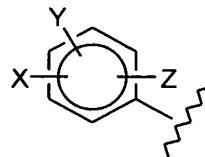
R³ is selected from the group consisting of H, OH, NH₂, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₆ alkenyl, substituted C₃ to C₆ alkenyl, alkynyl, substituted alkynyl, and COR^A;

R^A is selected from the group consisting of H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, and substituted C₁ to C₃ aminoalkyl;

R^4 is selected from the group consisting of H, halogen, CN, NH₂, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₁ to C₆ alkoxy, substituted C₁ to C₆ alkoxy, C₁ to C₆ aminoalkyl, and substituted C₁ to C₆ aminoalkyl;

R^5 is selected from the group consisting of a), b) and c):

- a) a substituted benzene ring having the structure:



X is selected from the group consisting of halogen, OH, CN, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ thioalkyl, substituted C₁ to C₃ thioalkyl, S(O)alkyl, S(O)₂alkyl, C₁ to C₃ aminoalkyl, substituted C₁ to C₃ aminoalkyl, NO₂, C₁ to C₃ perfluoroalkyl, substituted C₁ to C₃ perfluoroalkyl, 5 or 6 membered heterocyclic ring having 1 to 3 heteroatoms, CONH₂, CSNH₂, CNHNHOH, CNH₂NOH, CNHNOH, COR^B, CSR^B, OCOR^B, and NR^CCOR^B;

R^B is selected from the group consisting of H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, aryl, substituted aryl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, and substituted C₁ to C₃ aminoalkyl;

R^C is H, C₁ to C₃ alkyl, or substituted C₁ to C₃ alkyl;

Y and Z are independently selected from the group consisting of H, halogen, CN, NO₂, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₄ alkyl, substituted C₁ to C₄ alkyl, C₁ to C₃ thioalkyl, and substituted C₁ to C₃ thioalkyl;

b) a five or six membered heterocyclic ring having 1, 2, or 3 heteroatoms selected from the group consisting of O, S, SO, SO₂ and NR⁶ and having one or two independent substituents from the group consisting of H, halogen, CN, NO₂, C₁ to C₄ alkyl, substituted C₁ to C₄ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, substituted C₁ to C₃ aminoalkyl, COR^D, CSR^D, and NR^ECOR^D;

R^D is H, NH₂, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, aryl, substituted aryl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, or substituted C₁ to C₃ aminoalkyl;

R^E is H, C₁ to C₃ alkyl, or substituted C₁ to C₃ alkyl;

R^6 is H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, or C₁ to C₄CO₂alkyl;
or

c) an indol-4-yl, indol-7-yl or benzo-2-thiophene moiety, wherein
said moiety is optionally substituted by from 1 to 3 substituents selected from the
group consisting of halogen, alkyl, substituted alkyl, CN, NO₂, alkoxy, substituted
alkoxy, and CF₃;

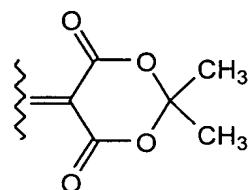
Q^1 is S, NR⁷, or CR⁸R⁹;

R^7 is selected from the group consisting of CN, C₁ to C₆ alkyl, substituted C₁
to C₆ alkyl, C₃ to C₈ cycloalkyl, substituted C₃ to C₈ cycloalkyl, aryl, substituted aryl,
heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl,
substituted aroyl, SO₂CF₃, OR¹¹, and NR¹¹R¹²;

R^8 and R^9 are independent substituents selected from the group consisting of
H, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₈ cycloalkyl, substituted C₃ to C₈
cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, NO₂,
CN, and CO₂R¹⁰;

R^{10} is C₁ to C₃ alkyl or substituted C₁ to C₃ alkyl;

or CR⁸R⁹ comprise a six membered ring having the structure:



R^{11} and R^{12} are independently selected from the group consisting of H, alkyl,
substituted alkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic
ring, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl;
or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

32. The method according to claim 31, wherein said carcinomas are
selected from the group consisting of ovary, breast, colon, endometrial, uterine, and
prostate carcinomas.

33. The method according to claim 31, wherein R^1 and R^2 are alkyl or
substituted alkyl; R^3 is H.

34. The method according to claim 31, wherein R¹ and R² are joined to form a ring selected from the group consisting of -CH₂(CH₂)_nCH₂-, -CH₂CH₂C(CH₃)₂CH₂CH₂-, -O(CH₂)_mCH₂-, -O(CH₂)_pO-, -CH₂CH₂OCH₂CH₂-, -CH₂CH₂N(H)CH₂CH₂-, and -CH₂CH₂N(alkyl)CH₂CH₂-, R³ is H.

35. The method according to claim 31, wherein R³ is H; Q¹ is S or NR⁷.

36. The method according to claim 31, wherein said compound is selected from the group consisting of 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-thione, 3-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzonitrile, 4-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-2-thiophenecarbonitrile, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 4-Methyl-5-(1,2-dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-thiophenethioamide, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-(tert-butoxycarbonyl)-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-H-pyrrole-2-carbonitrile, 5-(2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-3-thiophenecarbonitrile, 5-(1,2-Dihydro-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-2-thiophenecarbonitrile, 5-(3-Fluoro-4-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(2-Amino-5-pyrimidinyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 5-(3-chlorophenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-Benzyl-5-(3-chlorophenyl)-3-methyl-1,3-dihydro-2H-indole-2-thione, 4-(3,3-dimethyl-2-thioxo-2,3-dihydro-1H-indol-5-yl)-2-furonitrile, 5-(3-methoxyphenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-pyridinecarbonitrile, 5-(3,4-Difluorophenyl)spiro[cyclohexane-

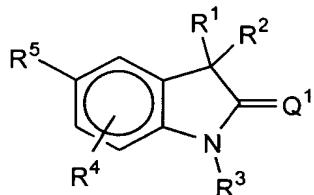
1,3-[3H]indol]-2(1H)-thione, 5-(5-Chloro-2-thienyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-furancarbonitrile, 5-(3-Chloro-4-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chloro-5-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3,5-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-propyl-2-thiophenecarbonitrile, 5-(3-Fluoro-4-nitrophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-furancarbonitrile, 5"--(3-Chlorophenyl)spiro[cyclobutane-1,3"--[3H]indol]-2"(1'H)-thione, 5"--(2-Chlorophenyl)spiro[cyclohexane-1,3"--[3H]indol]-2"(1'H)-thione, 5"--(4-Chlorophenyl)spiro[cyclohexane-1,3"--[3H]indol]-2"(1'H)-thione, 5-(1",2"-Dihydro-2"-thioxospiro[cyclohexane-1,3"--[3H]indol]-5"-yl)-4-methyl-2-thiophenecarbonitrile, 5-(1",2"-Dihydro-2"-thioxospiro[cyclohexane-1,3"--[3H]indol]-5"-yl)-2-thiophenecarbonitrile, 5"--(3-Fluorophenyl)spiro[cyclohexane-1,3"--[3H]indol]-2"(1'H)-thione, 5-(3-Hydroxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-chlorophenyl)-3,3-diethyl-1,3-dihydro-2H-indole-2-thione, 5-(4-Fluoro-3-(trifluoromethyl)phenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-n-butyl-2-thiophenecarbonitrile, 5-(3-Fluoro-5-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chlorophenyl)-N-hydroxyspiro[cyclohexane-1,3'-[3H]indol]-2-amine, N-(Acetyloxy)-5'-(3-chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2"amine, 5'-(3-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(2-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(4-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3,4-difluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-methoxyphenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-nitrophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-cyanophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 3-(1',2'-Dihydro-2'-(hydroxyimino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluorobenzonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-

methyl-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-
(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 4-(Spiro[cyclohexane-1,3'-
[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-
1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-1-methyl-2-carbonitrile,
5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-2-
carbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'(acetoxymino)-5'-yl)-2-
thiophenecarbonitrile, 3-Fluoro-N'-hydroxy-5-(2'-(hydroxyamino)spiro[cyclohexane-
1,3'-[3H]indol]-5'-yl)benzenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-
1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarboximidamide, N'-
Hydroxy-4-(spiro[cyclohexane-1,3'-[3H]indol]-2'-hydroxyimino)-5'-yl-2-
thiophenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-
(hydroxyimino)-5'-yl)-2-thiophenecarboximidamide,
5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yldenencyanamide,
5'-(3-Cyano-5-fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yldenencyanamide,
5'-(5-Cyano-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2-yldenencyanamide,
5'-(5-Cyano-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-yldenencyanamide,
5'-(5-Cyano-3-methyl-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-
yldenencyanamide, 5'-(5-Cyano-thiophen-3-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-
yldenencyanamide, 3-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-
5-fluoro-benzonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-
yl)-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-
[3H]indol]-5'-yl)-1-methyl-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-
spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, 5-(2'-
Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-4-methyl-thiophene-2-
carbonitrile, and 4-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-
thiophene-2-carbonitrile, or a pharmaceutically acceptable salt, tautomer, metabolite,
or prodrug thereof.

37. The method according to claim 31, wherein said compound is 5'-(5-
Cyano-1-methyl-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-

yildenecyanamide, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

38. A method of treating dysfunctional bleeding, uterine leiomyomata, endometriosis, and/or polycystic ovary syndrome, comprising the step of delivering to a female in need thereof a composition comprising a compound of formula I, or a tautomer thereof, in a regimen which involves delivering a pharmaceutically effective amount of one or more of a selective estrogen receptor modulator to said female, wherein formula I is:



I

wherein:

R¹ and R² are selected from the group consisting of H, alkyl, substituted alkyl, OH, O(alkyl), O(substituted alkyl), O(Acetyl), aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, alkylaryl, substituted alkylaryl, alkylheteroaryl, substituted alkylheteroaryl, 1-propynyl, substituted 1-propynyl, 3-propynyl, and substituted 3-propynyl;

or R¹ and R² are joined to form a ring selected from the group consisting of -CH₂(CH₂)_nCH₂-, -CH₂CH₂C(CH₃)₂CH₂CH₂-, -O(CH₂)_mCH₂-, -O(CH₂)_pO-, -CH₂CH₂OCH₂CH₂-, -CH₂CH₂N(H)CH₂CH₂-, and -CH₂CH₂N(alkyl)CH₂CH₂-;

m is an integer from 1 to 4;

n is an integer from 1 to 5;

p is an integer from 1 to 4;

or R¹ and R² form a double bond to C(CH₃)₂, C(cycloalkyl), O, or C(cycloether);

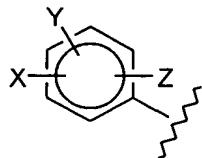
R³ is selected from the group consisting of H, OH, NH₂, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₆ alkenyl, substituted C₃ to C₆ alkenyl, alkynyl, substituted alkynyl, and COR^A;

R^A is selected from the group consisting of H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, and substituted C₁ to C₃ aminoalkyl;

R^4 is selected from the group consisting of H, halogen, CN, NH₂, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₁ to C₆ alkoxy, substituted C₁ to C₆ alkoxy, C₁ to C₆ aminoalkyl, and substituted C₁ to C₆ aminoalkyl;

R^5 is selected from the group consisting of a), b) and c):

- a) a substituted benzene ring having the structure:



X is selected from the group consisting of halogen, OH, CN, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ thioalkyl, substituted C₁ to C₃ thioalkyl, S(O)alkyl, S(O)₂alkyl, C₁ to C₃ aminoalkyl, substituted C₁ to C₃ aminoalkyl, NO₂, C₁ to C₃ perfluoroalkyl, 5 or 6 membered heterocyclic ring having 1 to 3 heteroatoms, CONH₂, CSNH₂, CNHNHOH, CNH₂NOH, CNHNOH, COR^B, CSR^B, OCOR^B, and NR^CCOR^B;

R^B is selected from the group consisting of H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, aryl, substituted aryl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, and substituted C₁ to C₃ aminoalkyl;

R^C is H, C₁ to C₃ alkyl, or substituted C₁ to C₃ alkyl;

Y and Z are independently selected from the group consisting of H, halogen, CN, NO₂, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₄ alkyl, substituted C₁ to C₄ alkyl, C₁ to C₃ thioalkyl, and substituted C₁ to C₃ thioalkyl;

b) a five or six membered heterocyclic ring having 1, 2, or 3 heteroatoms selected from the group consisting of O, S, SO, SO₂ and NR⁶ and having one or two independent substituents from the group consisting of H, halogen, CN, NO₂, C₁ to C₄ alkyl, substituted C₁ to C₄ alkyl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, substituted C₁ to C₃ aminoalkyl, COR^D, CSR^D, and NR^ECOR^D;

R^D is H, NH₂, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, aryl,

substituted aryl, C₁ to C₃ alkoxy, substituted C₁ to C₃ alkoxy, C₁ to C₃ aminoalkyl, or substituted C₁ to C₃ aminoalkyl;

R^E is H, C₁ to C₃ alkyl, or substituted C₁ to C₃ alkyl;

R⁶ is H, C₁ to C₃ alkyl, substituted C₁ to C₃ alkyl, or C₁ to C₄CO₂alkyl;

or

c) an indol-4-yl, indol-7-yl or benzo-2-thiophene moiety, wherein said moiety is optionally substituted by from 1 to 3 substituents selected from the group consisting of halogen, alkyl, substituted alkyl, CN, NO₂, alkoxy, substituted alkoxy, and CF₃;

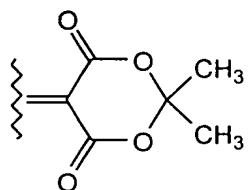
Q¹ is S, NR⁷, or CR⁸R⁹;

R⁷ is selected from the group consisting of CN, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₈ cycloalkyl, substituted C₃ to C₈ cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, SO₂CF₃, OR¹¹, and NR¹¹R¹²;

R⁸ and R⁹ are independent substituents selected from the group consisting of H, C₁ to C₆ alkyl, substituted C₁ to C₆ alkyl, C₃ to C₈ cycloalkyl, substituted C₃ to C₈ cycloalkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, NO₂, CN, and CO₂R¹⁰;

R¹⁰ is C₁ to C₃ alkyl or substituted C₁ to C₃ alkyl;

or CR⁸R⁹ comprise a six membered ring having the structure:



R¹¹ and R¹² are independently selected from the group consisting of H, alkyl, substituted alkyl, aryl, substituted aryl, heterocyclic ring, substituted heterocyclic ring, acyl, substituted acyl, aroyl, substituted aroyl, sulfonyl, and substituted sulfonyl; or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

39. The method according to claim 38, wherein R¹ and R² are alkyl or substituted alkyl; R³ is H.

40. The method according to claim 38, wherein R¹ and R² are joined to form a ring selected from the group consisting of -CH₂(CH₂)_nCH₂-, -CH₂CH₂C(CH₃)₂CH₂CH₂-, -O(CH₂)_mCH₂-, -O(CH₂)_pO-, -CH₂CH₂OCH₂CH₂-, -CH₂CH₂N(H)CH₂CH₂-, and -CH₂CH₂N(alkyl)CH₂CH₂-, R³ is H.

41. The method according to claim 38, wherein R³ is H; Q¹ is S or NR⁷.

42. The method according to claim 38, wherein said compound is selected from the group consisting of 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-thione, 3-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzonitrile, 4-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-2-thiophenecarbonitrile, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 4-Methyl-5-(1,2-dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-thiophenethioamide, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-(tert-butoxycarbonyl)-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-H-pyrrole-2-carbonitrile, 5-(2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-3-thiophenecarbonitrile, 5-(1,2-Dihydro-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-2-thiophenecarbonitrile, 5-(3-Fluoro-4-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(2-Amino-5-pyrimidinyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-5-fluorobenzonitrile, 5-(3-chlorophenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-Benzyl-5-(3-chlorophenyl)-3-methyl-1,3-dihydro-2H-indole-2-thione, 4-(3,3-dimethyl-2-thioxo-2,3-dihydro-1H-indol-5-yl)-2-furonitrile, 5-(3-methoxyphenyl)-3,3-dimethyl-1,3-dihydro-2H-indole-2-thione, 3-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-pyridinecarbonitrile, 5-(3,4-Difluorophenyl)spiro[cyclohexane-

1,3-[3H]indol]-2(1H)-thione, 5-(5-Chloro-2-thienyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-furancarbonitrile, 5-(3-Chloro-4-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chloro-5-fluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3,5-Difluorophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-propyl-2-thiophenecarbonitrile, 5-(3-Fluoro-4-nitrophenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-furancarbonitrile, 5"--(3-Chlorophenyl)spiro[cyclobutane-1,3"--[3H]indol]-2"(1'H)-thione, 5"--(2-Chlorophenyl)spiro[cyclohexane-1,3"--[3H]indol]-2"(1'H)-thione, 5"--(4-Chlorophenyl)spiro[cyclohexane-1,3"--[3H]indol]-2"(1'H)-thione, 5-(1",2"-Dihydro-2"-thioxospiro[cyclohexane-1,3"--[3H]indol]-5"-yl)-4-methyl-2-thiophenecarbonitrile, 5-(1",2"-Dihydro-2"-thioxospiro[cyclohexane-1,3"--[3H]indol]-5"-yl)-2-thiophenecarbonitrile, 5"--(3-Fluorophenyl)spiro[cyclohexane-1,3"- [3H]indol]-2"(1'H)-thione, 5-(3-Hydroxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-chlorophenyl)-3,3-diethyl-1,3-dihydro-2H-indole-2-thione, 5-(4-Fluoro-3-(trifluoromethyl)phenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-fluorobenzonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-n-butyl-2-thiophenecarbonitrile, 5-(3-Fluoro-5-methoxyphenyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(3-Chlorophenyl)-N-hydroxyspiro[cyclohexane-1,3'-[3H]indol]-2-amine, N-(Acetyloxy)-5'-(3-chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2"amine, 5'-(3-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(2-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(4-Fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3,4-difluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-methoxyphenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-nitrophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 5'-(3-cyanophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'(1'H)-one oxime, 3-(1',2'-Dihydro-2'-(hydroxyimino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluorobenzonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-

methyl-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarbonitrile, 5-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-1-methyl-2-carbonitrile, 5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-1H-pyrrole-2-carbonitrile, 4-(Spiro[cyclohexane-1,3'-[3H]indol]-2'-(acetoxymino)-5'-yl)-2-thiophenecarbonitrile, 3-Fluoro-N'-hydroxy-5-(2'-(hydroxyamino)spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)benzenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-4-methyl-2-thiophenecarboximidamide, N'-Hydroxy-4-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboximidamide, N'-Hydroxy-5-(spiro[cyclohexane-1,3'-[3H]indol]-2'-(hydroxyimino)-5'-yl)-2-thiophenecarboximidamide, 5'-(3-Chlorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(3-Cyano-5-fluorophenyl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-3-methyl-thiophen-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 5'-(5-Cyano-thiophen-3-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, 3-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-5-fluoro-benzonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-1H-pyrrole-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, 5-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-4-methyl-thiophene-2-carbonitrile, and 4-(2'-Cyanomethylene-spiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-thiophene-2-carbonitrile, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

43. The method according to claim 38, wherein said compound is 5'-(5-Cyano-1-methyl-1H-pyrrol-2-yl)spiro[cyclohexane-1,3'-[3H]indol]-2'-ylidenecyanamide, or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.